

MAGNETIC RECORDING MEDIUM

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Abstract of JP2000222715

PROBLEM TO BE SOLVED: To improve the signal-to-noise ratio and the halfwidth of solitary waves without deteriorating overwriting characteristics and off-track characteristics by forming a nonmagnetic primary film, magnetic recording film, soft magnetic film and protective film on a nonmagnetic substrate, controlling the coercive force to a specified value or higher, and controlling the film thickness of the soft magnetic film to a specified range.

SOLUTION: This medium is produced by successively forming a nonmagnetic primary film 2, magnetic recording film 3, soft magnetic film 4 and protective film 5 on a nonmagnetic substrate 1. Preferably, the coercive force is controlled to ≥ 2500 Oe and the film thickness of the soft magnetic film is controlled to 5 to 50 \AA . In the obtd. magnetic recording medium, the extract amt. of Ni can be controlled to $\leq 0.08 \text{ ng/cm}^2$ in the unit substrate area by forming the soft magnetic film 4. Especially, the obtd. medium shows excellent characteristics when a head having a reproducing device using a magnetoresistance effect such as an inductive-MR composite head (magnetoresistance effect head) is used.

